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White Pine Power Project

VISUAL RESOURCES BASELINE

TECHNICAL REPORT

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VISUAL RESOURCES BASELINE

Technical Report

For The

WHITE PINE POWER PROJECT

Prepared By

DAMES & MOORE

October 1983

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SUMMARY

The White Pine Power Project (WPPP) is a proposed 1500 megawatt coal-fueled, steam-electric generating facility to be located in White Pine County, Nevada. In addition to the power generation system, the Project consists of a power transmission system, a water supply system, and a coal transportation system. As currently proposed, WPPP will be jointly owned by White Pine County and two private utilities. Project participants include eight Nevada entities and six California municipalities.

The preferred site for the WPPP Generating Station is the North Steptoe Valley Site. The Butte Valley Site and the Spring Valley Site are feasible alternatives to the preferred site. The water supply system for each site includes well fields located within the same valley, except for the Butte Valley Site which will require additional well fields in Steptoe Valley. The preferred power transmission system for each site includes two new transmission lines terminating in Southern Nevada and one new transmission line terminating in or near White Pine County. The preferred coal transportation system includes a new and upgraded railroad from the site to existing railroads in Northern Nevada. An alternate system includes a new railroad from the site to an existing railroad in Southern Nevada.

This technical report, which includes baseline material for the WPPP Environmental Impact Statement (EIS), presents the results of field and literature studies. The technical report is intended to be a background document providing details of information summarized in the EIS. It also provides the basis for determining environmental impacts and mitigative measures. The information presented in this report includes the scope of work (study area limits and methodologies employed), a description of the regional setting, and the visibility and landscape characteristics associated with each proposed facility.

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1.0 INTRODUCTION

The introduction of White Pine Power Project (WPPP) facilities will add new elements to the existing landscape, with potential to alter the aesthetics or visual character of the project region. These facilities would be constructed on public lands which, as required by the Federal Land Policy and Management Act of 1976, must be managed in a manner that protects scenic values.

This technical report describes the existing visual resources of the region in which WPPP is proposed and the methodologies used to assess visual impacts. This information will be summarized in the WPPP Environmental Impact Statement.

2.0 SCOPE OF WORK

2.1 PURPOSE

The purpose of the baseline visual analysis is to describe the key visual elements that together form the aesthetic or visual landscape of the region within which WPPP facilities are planned. This description of baseline conditions provides a foundation for conducting the visual impact analysis, since such an analysis must identify and evaluate changes to existing conditions as a result of WPPP.

The visual analysis is based on two separate methodologies: 1) that used by Dames & Moore on projects of this nature; and 2) that developed by the U.S. Bureau of Land Management (BLM) for proposed projects affecting BLM lands. These approaches are described in Section 2.3 and in Appendix A.

2.2 STUDY AREA

The visual analysis is limited geographically to a 20-mile radius for the power generation system and to a 2-mile-wide corridor for power transmission system facilities. Visual impacts are addressed within a radius of 0.5 mile of the water supply system and within a 1.5-mile radius

of the coal transportation system. These distances represent the general limits within which those facilities may be seen under normal viewing conditions. The analysis is further limited to the expected viewshed of each facility, that is, the areas from which the facility would be seen by an observer standing at ground level, accounting for local topographic interferences. Viewsheds for the proposed power generation system were identified by a computer model (see Section 2.4). It is assumed that transmission lines and towers would be fully visible within the two-mile-wide study corridor. Since vegetation in the vicinity of proposed project facilities is low in profile and sparsely distributed, it is assumed that views of most facilities would not be obstructed by canopy cover.

The proposed water supply system (wells, pumps, valves, and pipelines) and coal transportation system (railroad) would be low profile features relative to their characteristic landscapes. The discussion of visual impacts relative to those facilities is therefore qualitative and not carried out to the level of detail as is required for other visually prominent facilities such as the power plant itself, and power transmission facilities. Pumps and valves may be enclosed by fencing which may add to visibility of the water supply system.

2.3 EVALUATION METHODOLOGY

2.3.1 Introduction

The description of existing visual resources and the assessment of visual impacts of WPPP rely on two separate methodologies. The first, developed by Dames & Moore and adapted from principles established by the U.S. Forest Service, derives visual sensitivity ratings for proposed facilities. Dames & Moore's methodology is regularly applied on a project-specific basis and is particularly useful in assessing impacts of lineal facilities (for example, transmission lines), parts of which are seen under different viewing situations. This allows such facilities to be analyzed as segments so that sensitivity ratings can be shown on maps for ease in making evaluations and comparisons. For nonlineal facilities (for example, power plants) the system uses a viewshed analysis (optionally defined by computer) which forms the geographic basis for data collection and analysis.

The second methodology used is the Visual Resource Management (VRM) Program developed by the BLM. This system shares many of the elements of Dames & Moore's visual methodology. One important difference is that the VRM program establishes visual management classes for landscapes on a generic, rather than project-specific basis. Individual

projects are assessed through contrast ratings which determine whether a proposed facility meets the guidelines of the management class applied to the surrounding landscape. These ratings directly respond to the BLM's internal requirements for managing its resources.

The two methodologies employed here are complementary and may be used side-by-side in order to better evaluate the different types of facilities planned for WPPP. The following sections describe in further detail each of the two visual methodologies employed.

2.3.2 Dames & Moore Visual Analysis Methodology

Visual sensitivity ratings are derived through an analysis of three major factors that affect landscape visual sensitivity: 1) landscape condition; 2) predicted visibility; and 3) potential population exposure. The overall visual sensitivity of the project is determined by simultaneous consideration of these factors. The relationships of the visual sensitivity factors and their components are explained in Appendix A. The three major factors are as follows:

- Landscape Condition - The landscape condition addresses the degree to which the landscape has been

altered from its natural state and the inherent capacity of the landscape to absorb visual changes resulting from the project. The landscape condition is assessed through examination of topographic and land use maps, and through field reconnaissance.

- Predicted Visibility - The predicted visibility assessment identifies the degree of visibility that project facilities would have in the landscape. This analysis is based on the position of facilities relative to significant topographical or physiographic features; the resulting "viewshed" represents those areas from which the proposed facilities can be seen by an observer standing at ground level.

- Potential Population Exposure - Potential population exposure takes into account the locations from which people could potentially view the proposed facilities. This analysis incorporates two aspects of public visual exposure: 1) the distance zone containing the facility; and 2) the visual dominance of the facility from key viewing locations such as highways, parks, recreational areas, and urban residential areas.

The above factors are mapped and synthesized to produce visual sensitivity ratings for each of the proposed facilities.

The viewsheds for the proposed plant sites are identified through a computer model which plots visibility based on digital topographic data obtained from the U.S. Geological Survey (USGS) National Cartographic Information Center. This model is the VISTA routine in Dames & Moore's Geographic Information Management System (GIMS). The viewsheds identified by the model are based on a stack height of 750 feet. The viewsheds for the proposed transmission facilities were assumed to occupy the entire two-mile study corridor, and therefore were not identified by the computer model.

The computer-generated viewshed of the plant at each proposed site is shown on Figure 2-1. The viewshed represents the general area from which any portion of the plant stack (the facility's tallest feature) would be seen by an observer standing at ground level. The viewshed extends to a maximum radius of 20 miles from the plant site; beyond this distance, it would be difficult for a viewer to see the facility.

2.3.3 BLM Visual Resource Management Program

The BLM has developed a systematic approach to classifying the visual sensitivity of regions within its jurisdiction (U.S. Bureau of Land Management, 1980). The VRM Program is based on an inventory and map analysis of key visual elements (form, line, color, and texture) which together describe an area's overall scenic quality. Further consideration is given to the type, frequency and proximity of public exposure to the landscape. An overlay of maps representing scenic quality and public visual sensitivity results in a regional identification of management classes. These classes provide guidelines concerning the type and amount of man-made modification that may be introduced into a landscape without significantly degrading its scenic value.

The degree to which a proposed facility would adversely affect the visual quality of a landscape depends upon the amount of visual contrast created between the facility and the existing landscape character. The BLM has established a procedure for assessing the amount of visual contrast introduced by a proposed facility (U.S. Bureau of Land Management, 1978). This process numerically rates visual contrast by four landscape elements (form, line, color, and texture) related to each of three types of landscape features (land/water surface, vegetation, and structure).

Derived contrast ratings are then compared to the maximum contrast allowed by the landscape's designated visual management class. If a proposed activity exceeds VRM standards, mitigative measures may be designed to reduce visual impacts to an acceptable level.

3.0 REGIONAL SETTING

3.1 LANDSCAPE CHARACTERISTICS

The proposed WPPP facilities are planned in an area characterized by a series of north-south trending mountain ranges separated by open flat valleys. Elevation differences between mountain peaks and basin floors reach 7000 feet.

The area is generally arid, resulting in a sparse vegetation distribution and few perennial surface water features. This aridity limits agricultural activity mainly to animal grazing and dry farming. Natural vegetation patterns are largely determined by elevation. Since forested areas are found only in upper elevations, scenic views throughout most of the region are restricted primarily by local topographic relief and not by vegetative cover.

The region is primarily natural and rural in character, exhibiting comparatively little cultural modification to the natural landscape. In addition to the few urban centers in the region (Ely, McGill, Ruth, and other smaller communities), manmade features include highways, railroads, telephone and power lines, fences, mines, and a major copper smelter.

Regional landscape conditions, as defined in Chapter 1 and the Appendix of this report, are shown on Figure 3-1.

As shown by the figure, landscape conditions throughout the region are primarily natural. Areas adjacent to major highways, power lines, or other manmade features are designated natural dominance or mixed, depending on the degree of existing manmade modification. Residential or commercial areas such as those found in Ely and McGill are designated manmade dominance.

Together, the steep mountain slopes, flat open valley physiography, and the predominately rural character of the region create a landscape of interesting scenic views.

Recreational areas in the region are found primarily within the Humboldt National Forest and include Wheeler Peak Scenic Area and Lehman Caves National Monument. Historic sites include Ft. Shellbourne, the Pony Express Trail, and Ward Charcoal Ovens State Monument. Each of these facilities attracts recreational visitors who may be sensitive to changes in the visual landscape.

3.2 VISUAL RESOURCE MANAGEMENT CLASSES

The BLM has mapped visual management classes for portions of the WPPP study area, as shown on Figure 3-2. These classes "describe the different degrees of modification

allowed to the basic elements of the landscape" (U.S. Bureau of Land Management, 1980). Designation of VRM classes is based on an overlay of maps representing scenic quality and viewer sensitivity. Five classes are possible:

- Class 1 - Natural ecological changes and very limited management activity are allowed. Any contrast created within the characteristic landscape must not attract attention. This classification is applied to wilderness areas, wild and scenic rivers, and other similar situations.

- Class 2 - Changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. Changes are seen, but must not attract attention.

- Class 3 - Contrasts to the basic elements caused by a management activity are evident, but should remain subordinate to the existing landscape.

- Class 4 - Any contrast may attract attention and be a dominant feature of the landscape in terms of scale, but it should repeat the form, line, color, and texture of the characteristic landscape.

- Class 5 - This classification is applied to areas where the natural character of the landscape has been disturbed to a point where rehabilitation is needed to bring it up to one of the four other classifications. The classification also applies to areas where there is potential to increase the landscape's visual quality. It would, for example, be applied to areas where unacceptable cultural modification has lowered scenic quality; it is often used as an interim classification until objectives of another class can be reached.

In the absence of officially-adopted VRM classes, some areas within the BLM Egan Resource Area are assigned an interim Class 3 designation.

4.0 POWER GENERATION SYSTEM VISIBILITY

4.1 BUTTE VALLEY SITE

4.1.1 Landscape Condition

The Butte Valley site is located in the southern portion of Butte Valley between the Butte Mountains and the Egan Range. (A computer-generated perspective view of the topography of the area is provided in Figure 4-1.) The site is located on an alluvial fan formed by intermittent streams originating in the Butte Mountains to the west. Elevations at the site range from about 6200 to 6400 feet. Elevations in the ranges to the west, northeast, east, and southeast of the site reach 9000 feet.

The site is characterized by a natural landscape with a sparse distribution of scrub and brush vegetation. Butte Valley shows very little evidence of cultural modification to the natural landscape; such modifications are limited to dirt roads, wells, and fences.

4.1.2 Predicted Visibility

The Butte Valley plant viewshed map (Figure 2-1) shows that the plant stack would be highly visible from the

north and east directions. The viewshed extends to the foothills of the Cherry Creek and Egan ranges. Local topographic relief in the Butte Mountains west and southwest of the site would restrict some views from those directions.

4.1.3 Potential Population Exposure

The plant stack would not be visible from any major highways, recreational areas, or residential areas.

4.1.4 BLM Visual Resource Management Classification

The Butte Valley Site is on land that has been classified under the BLM VRM Program as interim Class 3. VRM class characteristics are described in Section 3.2.

4.2 NORTH STEPTOE VALLEY SITE

4.2.1 LANDSCAPE CONDITION

The North Steptoe Valley Site is located at the northern end of Steptoe Valley between the Cherry Creek and Schell Creek ranges. (A computer-generated perspective view of the topography of the area is provided in Figure 4-2.) Elevations at the site range from approximately 5800 to 6000 feet; the site slopes gently to the northwest. The site is

characterized by a landscape in a natural dominance condition, with a sparse distribution of scrub and brush vegetation. U.S. Highway 93 travels in a northeast-southwest direction adjacent to the eastern boundary of the site. In addition, U.S. Alternate Highway 50, State Highway 35, and the Nevada Northern Railroad are located in the vicinity of the site.

The mountain ranges to the east and west of the site are characterized by elevations exceeding 10,000 feet and coniferous forest cover.

Historic features in the vicinity include the Pony Express Trail which travels in an east-west direction approximately 10.5 miles south of the plant site, and the site of Ft. Schellbourne located adjacent to the Trail.

4.2.2 Predicted Visibility

The North Steptoe Valley plant viewshed map (Figure 2-1) shows that the plant stack would be highly visible within the valley. Local topographic relief in the Cherry Creek and Schell Creek ranges would restrict some views from those locations, and visibility would not extend beyond the crest of the ranges.

4.2.3 Potential Population Exposure

The plant would be visible to persons travelling in both directions on U.S. Highway 93. The plant may be visible within a background context to local residents near Cherry Creek. The plant may be faintly visible from the Pony Express Trail and Ft. Shellbourne historic site, but within a background context.

4.2.4 BLM Visual Resource Management Classification

The North Steptoe Valley Site is located within an area designated as interim Class 3 under the BLM VRM Program.

4.3 SPRING VALLEY SITE

4.3.1 Landscape Condition

The Spring Valley Site is located within the south-central portion of Spring Valley between the Schell Creek Range and Snake Range. (A perspective view of the topography of the area is provided in Figure 4-3.) Elevations at the site range from approximately 5800 to 6000 feet; the site is relatively flat. The site is located in a landscape in a natural dominance condition containing a sparse distribution of scrub and brush vegetation. Major man-made features in the

vicinity of the site include U.S. Highway 93 travelling in a north-south direction west of the site, and U.S. Highway 6/50 located about 4 miles north of the site. Elevations climb steeply in the mountain ranges located to the east and west of the site; Wheeler Peak, at 13,063 feet, is located approximately 8 miles to the east of the site boundary. This dramatic change in topography creates an especially compelling scenic landscape. Coniferous forest (bristlecone pine) covers many areas in the Schell Creek and Snake ranges above 8000 feet in elevation.

4.3.2 Predicted Visibility

The plant viewshed map (Figure 4-2) shows that the facility would be highly visible from the north, east, and south directions. The viewshed extends to the crest of the Snake Range, approximately 8 miles to the east of the site. Some views from the west and southwest would be restricted due to topographic interference. The viewshed does not account for canopy cover which would restrict some views from upper elevations.

4.3.3 Potential Population Exposure

The plant stack would be visible from transitory population sources, including U.S. Highways 93 and 6/50 and

other local roads. The stack would also be visible from points within the Humboldt National Forest (east of the site) but no major campgrounds or other recreational facilities would be affected. The stack would not be visible from major recreational areas in the Wheeler Peak Scenic Area since this area is located east of the highest ridge of the Snake Range.

4.3.4 BLM Visual Resource Management Classification

The Spring Valley Site is located within an area designated by the BLM as Class 4 under the VRM Program.

5.0 WATER SUPPLY SYSTEM VISIBILITY

The WPPP water supply system will consist of pipelines, wells, pumps, valves, and similar facilities. Pipelines would be buried underground along most of their routes, while other facilities would generally remain within five feet of ground level during operation. It is assumed, therefore, that the water supply system would be visible from a maximum distance of 0.5 mile in the absence of topographic, vegetative, or other interferences. It is likely that such facilities would be at least partially hidden by the scrub and brush vegetation characterizing much of the WPPP landscape.

5.1 BUTTE VALLEY SITE

5.1.1 Landscape Conditions

The water supply system associated with the Butte Valley Site in Butte Valley would be located in landscapes classified as natural or, where the pipelines would approach U.S. Highway 93, natural dominance. The pipeline route is characterized by scrub and brush vegetation. (The water supply system associated with the Butte Valley Site in Steptoe Valley is discussed in Section 5.2.)

5.1.2 Predicted Visibility/Population Exposure

The only major source of public exposure to the water supply system would be U.S. Highway 93 near the northern terminus of the pipeline (see Figure 3-1). This exposure would occur within a middleground-background distance zone under open inferior viewing conditions.

5.1.3 BLM Visual Resource Management Classification

The pipeline route and well fields are in areas that have been classified under the BLM VRM Program as interim Class 3.

5.2 NORTH STEPTOE VALLEY SITE

5.2.1 Landscape Conditions

The water supply system associated with the North Steptoe Valley Site would be located in a landscape in a natural dominance condition. The pipeline route is relatively flat and is characterized by sparsely distributed scrub and brush vegetation.

5.2.2 Predicted Visibility/Population Exposure

The pipelines would generally parallel U.S. Highway 93, the only major source of public exposure. Views of pumps or valves from the highway would occur within a middleground-background distance zone under open inferior conditions.

5.2.3 BLM Visual Resource Management Classification

The pipeline route and well fields are in areas that have been classified under the BLM VRM Program as interim Class 3.

5.3 SPRING VALLEY SITE

5.3.1 Landscape Condition

The water supply system associated with the Spring Valley Site would be located within landscapes in natural and natural dominance conditions. The pipeline route is relatively flat and is characterized by sparsely distributed scrub and brush vegetation.

5.3.2 Predicted Visibility/Population Exposure

The system would be visible from U.S. Highways 6/50 and 93 within a middleground-background distance zone under open inferior conditions.

5.3.3 BLM Visual Resource Management Classification

The pipeline route and well fields are in areas that have been classified under the BLM VRM Program as Class 4.

6.0 POWER TRANSMISSION SYSTEM VISIBILITY

The WPPP power transmission system will consist of 500 and 230 kv lines and towers. The height of towers for 500 and 230 kv lines will be approximately 140 and 87 feet, respectively. Average spacing between towers will be approximately four to five towers per mile.

It is assumed in this analysis that proposed transmission facilities would be fully visible within the two-mile-wide study corridors. Visibility levels and sources of population exposure to the transmission facilities for the three sites are shown on Figure 6-1.

6.1 BUTTE VALLEY SITE

6.1.1 Landscape Condition

Landscape conditions along the transmission corridors are shown on Figure 3-1. Generally, landscapes crossed by the transmission corridors are in a natural condition, except near highways and existing transmission facilities which modify the landscape to a natural dominance condition.

6.1.2 Predicted Visibility/Population Exposure

Sources of population exposure within the transmission corridors include U.S. Highways 50, 6, and 93, and State Highways 38 and 7. The corridors do not contain major permanent or recreational sources of population.

6.1.3 BLM Visual Resource Management Classification

The transmission corridors cross areas classified as Class 4 and interim Class 3 under the BLM VRM Program.

6.2 NORTH STEPTOE VALLEY SITE

6.2.1 Landscape Condition

Landscape conditions along the transmission corridors are shown on Figure 3-1. Generally, landscapes crossed by the corridors are in a natural condition, except near highways and existing transmission facilities which modify the landscape to a natural dominance condition.

6.2.2 Predicted Visibility/Population Exposure

Sources of population exposure within the two-mile-wide transmission corridors include U.S. Highways 50, 6, and

93 and State Highways 38 and 7. The corridors do not contain major permanent or recreational sources of population.

6.2.3 BLM Visual Resource Management Classification

The transmission corridors cross areas classified as Class 4 and Interim Class 3 under the BLM VRM Program.

6.3 SPRING VALLEY SITE

6.3.1 Landscape Condition

Landscape conditions along the transmission corridors are shown on Figure 3-1. Generally, landscapes crossed by the corridors are in a natural condition, except near highways and existing transmission facilities which modify the landscape to a natural dominance condition.

6.3.2 Predicted Visibility/Population Exposure

Sources of population exposure within the transmission corridors include U.S. Highway 93 and State Highway 7. The corridors do not contain major permanent or recreational sources of population.

6.3.3 BLM Visual Resource Management Classification

The transmission corridors cross areas classified as Class 3 and interim Class 3 under the BLM VRM Program.

7.0 COAL TRANSPORTATION SYSTEM VISIBILITY

The coal transportation system will include both existing railroads (Nevada Northern, Union Pacific, Southern Pacific, and Western Pacific) and new spur rail lines connecting the plant to those facilities. Two general systems are proposed: 1) the Northern Transportation System; and 2) the Southern Transportation System. Both systems would include single track lines provided with sidings for the passing of trains.

The Northern Transportation System would originate from the Southern Pacific Railroad at Cobre and the Western Pacific Railroad at Shafter. Utilizing part of the existing Nevada Northern Railroad, this system would generally proceed southward to the WPPP site. The Southern Transportation System would originate from the Union Pacific Railroad near Pioche and generally proceed northward to the WPPP site.

Because it is a ground-level facility, a railroad ordinarily is visible only at relatively close range and at an inferior position relative to background topography. It can be assumed that while a unit train may be visible from over 1.5 miles, the viewshed of the railroad itself would be

restricted to a half-mile distance. Long-range visibility is chiefly dependent on vegetative clearing and bed grading performed during rail construction. The low profile of existing vegetation and gentle topographic slope along much of the railroad routes would reduce the effect of these two elements. However, where rail lines would ascend from valley floors to cross mountain passes, extensive cut and fill may be required. In these cases, the railroads may introduce strong linear forms into the natural landscape. Therefore, the visual analysis places an emphasis on graded segments of the proposed rail lines.

The visual analysis is limited to the introduction of new facilities and to a 1.5-mile corridor centered on the proposed rail alignment.

7.1 BUTTE VALLEY SITE

7.1.1 Landscape Condition

Landscape conditions along the railroad routes are shown on Figure 3-1. All railroad routes to Butte Valley would cross landscapes in natural and natural dominance conditions.

The preferred northern route travels near Cherry Creek and crosses Egan Creek Pass where heavy rock cuts

would be required in order to achieve an acceptable alignment and grade. Abandoned mines and buildings of cultural and/or historical significance are found in the pass.

The alternate northern route climbs a grade as it approaches U.S. Highway 93 and may require cuts and fills up to 20 feet. Within Butte Valley, the line would maintain a relatively flat grade.

The southern route climbs a grade up the east side of Bristol Pass where up to 20-foot-high cuts and fills would be required. Along the west side of the pass, extensive cuts and fills in rocks, as well as several six-degree curves, would be necessary. Moderate grading will be necessary along Jakes Wash, while extensive rock cuts and fills will be necessary between U.S. Highway 50 and Robber Roost Canyon.

7.1.2 Predicted Visibility

The rail lines will introduce strong linear forms into the landscape where extensive cut and fill grading is performed (see Section 7.1.1). Therefore, long-range visibility (up to 1.5 miles) would be highest near those areas. Within Butte Valley, the viewshed of the rail lines will be restricted to approximately 0.5 mile.

7.1.3 Potential Population Exposure

The preferred northern route may be visible from ranches near Cherry Creek and from State Highway 489. The alternate northern route would be visible from U.S. Highway 93 at the grade crossing. The southern route would be visible from U.S. Highways 93, 6 and 50 and State Highway 318 where the railroad would cross those highways. Within Butte Valley, the railroad routes would not be visible to permanent or transitory populations.

7.1.4 BLM Visual Resource Management Classification

The railroad routes cross lands designated as interim Class 3, Class 3, and Class 4, under the BLM VRM Program.

7.2 NORTH STEPTOE VALLEY SITE

7.2.1 Landscape Condition

Landscape conditions along the railroad routes are shown on Figure 3-1. All railroad routes to the North Steptoe Valley Site cross landscapes in natural and natural dominance conditions.

The preferred northern route will require approximately 5 miles of new relatively level rail construction to connect the Nevada Northern Railroad with the plant site. The alternate northern route will require moderate rock cuts through the Antelope Range.

The preferred southern route will require significant cut and fill grading between Pioche and the entrance into Lake Valley, near Dutch John Mountain, through Muleshoe Pass, and through the pass between Cave Valley and the Lower Steptoe Valley. The route crosses BLM Wilderness Study Area (WSA) NV-040-168 and WSA NV-040-169. The alternate southern route climbs a grade between the northern end of Spring Valley and a summit near the source of Spring Valley Creek.

7.2.2 Predicted Visibility

The rail lines will be most visible where extensive cut and fill grading is required (see Section 7.2.1). Within level valleys, the viewshed of the rail lines will be restricted to approximately 0.5 mile.

7.2.3 Potential Population Exposure

The preferred northern route would not be visible to significant population sources. The alternate northern

route would be visible at grade crossings from Alternate U.S. Highway 50 and U.S. Highway 93. The preferred southern route would be visible as it crosses U.S. Highway 93. The alternate southern route would be visible from U.S. Highways 93, 6, and 50. No significant permanent or recreational population sources would be affected.

7.2.4 BLM Visual Resource Management Classification

The railroad routes cross lands designated as interim Class 3 and Class 4 under the BLM VRM Program.

7.3 SPRING VALLEY SITE

7.3.1 Landscape Condition

Landscape conditions along the railroad routes are shown on Figure 3-1. All railroad routes to the Spring Valley Site cross landscapes in natural and natural dominance conditions.

The preferred northern route climbs a grade between the southern foothills of the Boone Spring Hills and a summit near the source of Spring Valley Creek. The route enters Spring Valley on a downward grade, and thereafter maintains relatively mild grades to the site.

The alternate northern route climbs a grade for approximately nine miles along the foothills of Currie Hills. From the summit, the route continues on a downward grade for another nine miles to the Alternate U.S. Highway 50 crossing near the Boone Spring Hills.

The preferred and alternate southern routes will require moderate cut and fill gradings near Lake Valley Summit.

7.3.2 Predicted Visibility

The rail lines will be most visible where extensive cut and fill grading is required (see Section 7.3.1). Within flat areas such as Lake Valley and Spring Valley, the viewshed of the rail lines will be restricted to approximately 0.5 mile.

7.3.3 Potential Population Exposure

The preferred and alternate northern routes would be visible from Alternate U.S. Highway 93 and U.S. Highway 6/50 as they cross those roads. The preferred and alternate southern routes parallel and would be visible from U.S. Highway 93.

7.3.4 BLM Visual Resource Management Classification

The railroad routes cross lands designated as interim Class 3 and Class 4 under the BLM VRM Program.

8.0 REFERENCES

U.S. Bureau of Land Management, BLM Manual, Section 8431, Visual Resource Contrast Rating, 1978.

U.S. Bureau of Land Management. Visual Resource Management Program, 1980.

U.S. Forest Service. The Visual Management System, National Forest Landscape Management, vol. 2, 1974.

FIGURES

WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

REGIONAL LANDSCAPE CONDITIONS

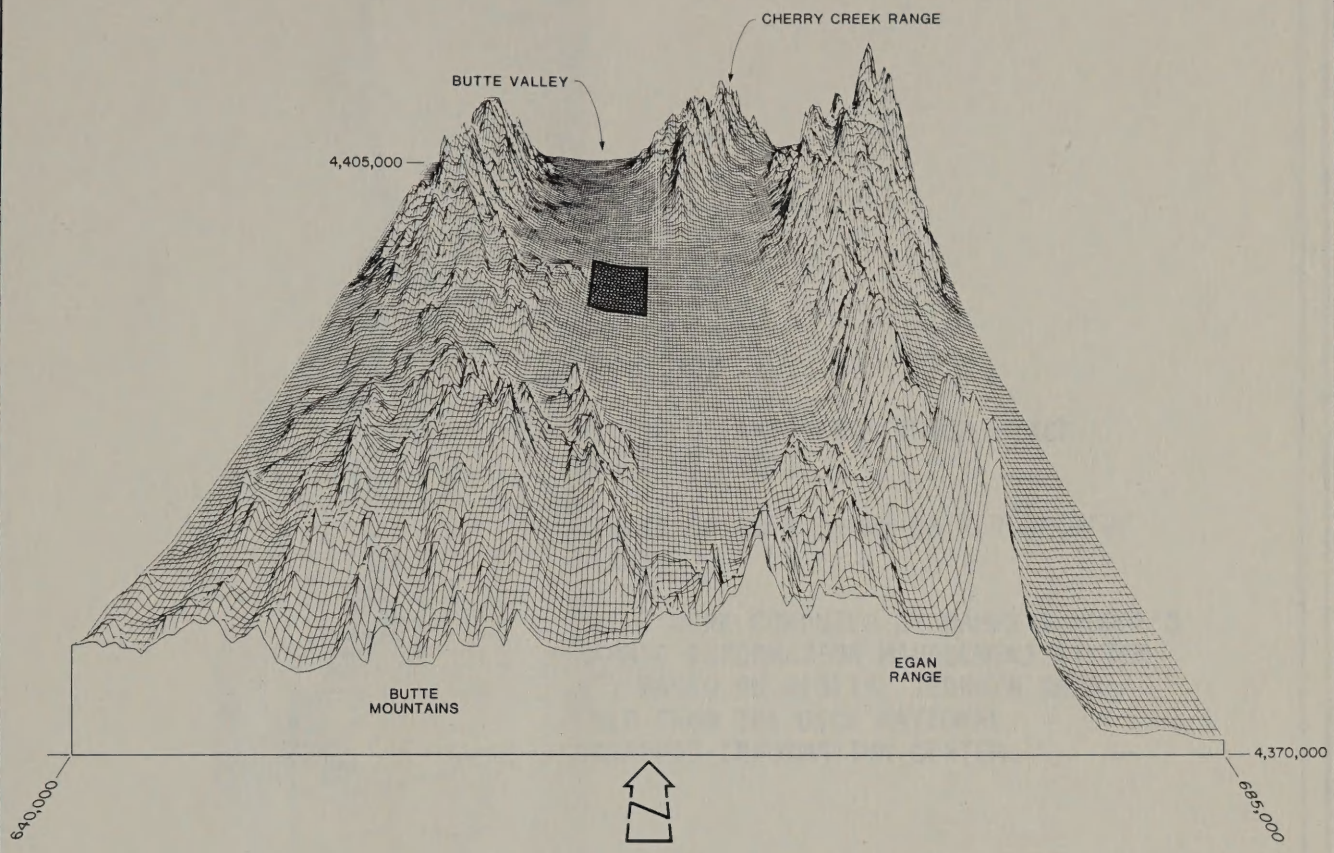
FIGURE 3-1

WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

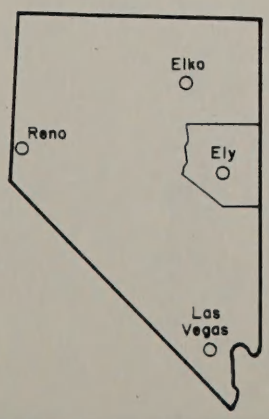
BLM VISUAL RESOURCE MANAGEMENT CLASSES

FIGURE 3-2



BUTTE VALLEY SITE

NOTES: STUDY AREA COORDINATES ARE IN METERS (UTM ZONE 11).
VERTICAL SCALE IS EXAGGERATED.
GENERATED BY DAMES & MOORE'S GEOGRAPHIC INFORMATION MANAGEMENT SYSTEM.

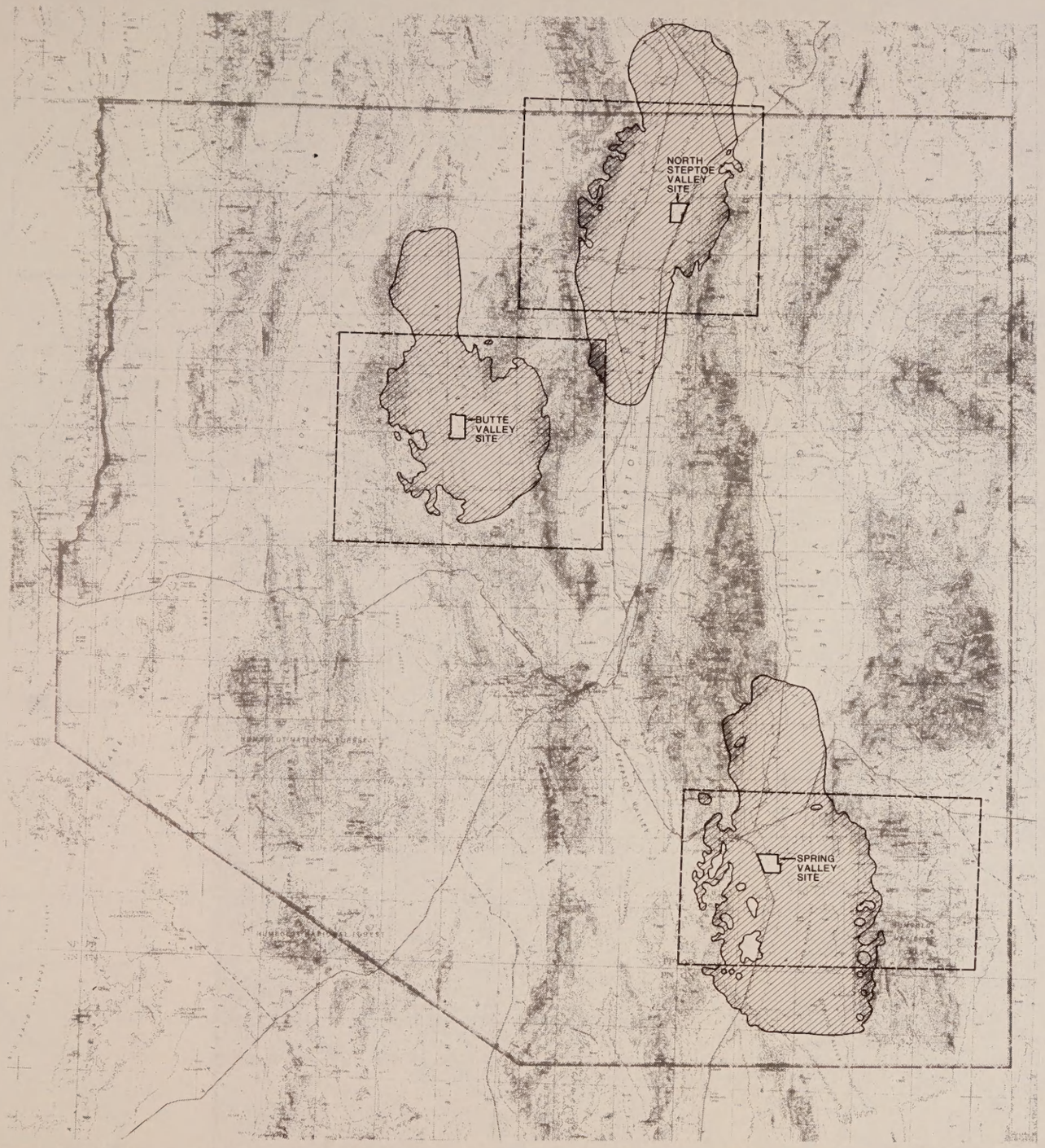


WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

PERSPECTIVE VIEW BUTTE VALLEY

FIGURE 4-1



LEGEND:

WPPP SITE

VIEWSHED (AREA FROM WHICH STACK WOULD BE SEEN)

LIMITS OF AREA SHOWN ON PERSPECTIVE VIEWS

NOTE: VIEWSHEDS WERE COMPUTED BY DAMES & MOORE'S GEOGRAPHIC INFORMATION MANAGEMENT SYSTEM (GIMS™) BASED ON DIGITAL TERRAIN DATA OBTAINED FROM THE USGS NATIONAL CARTOGRAPHIC INFORMATION CENTER.

N

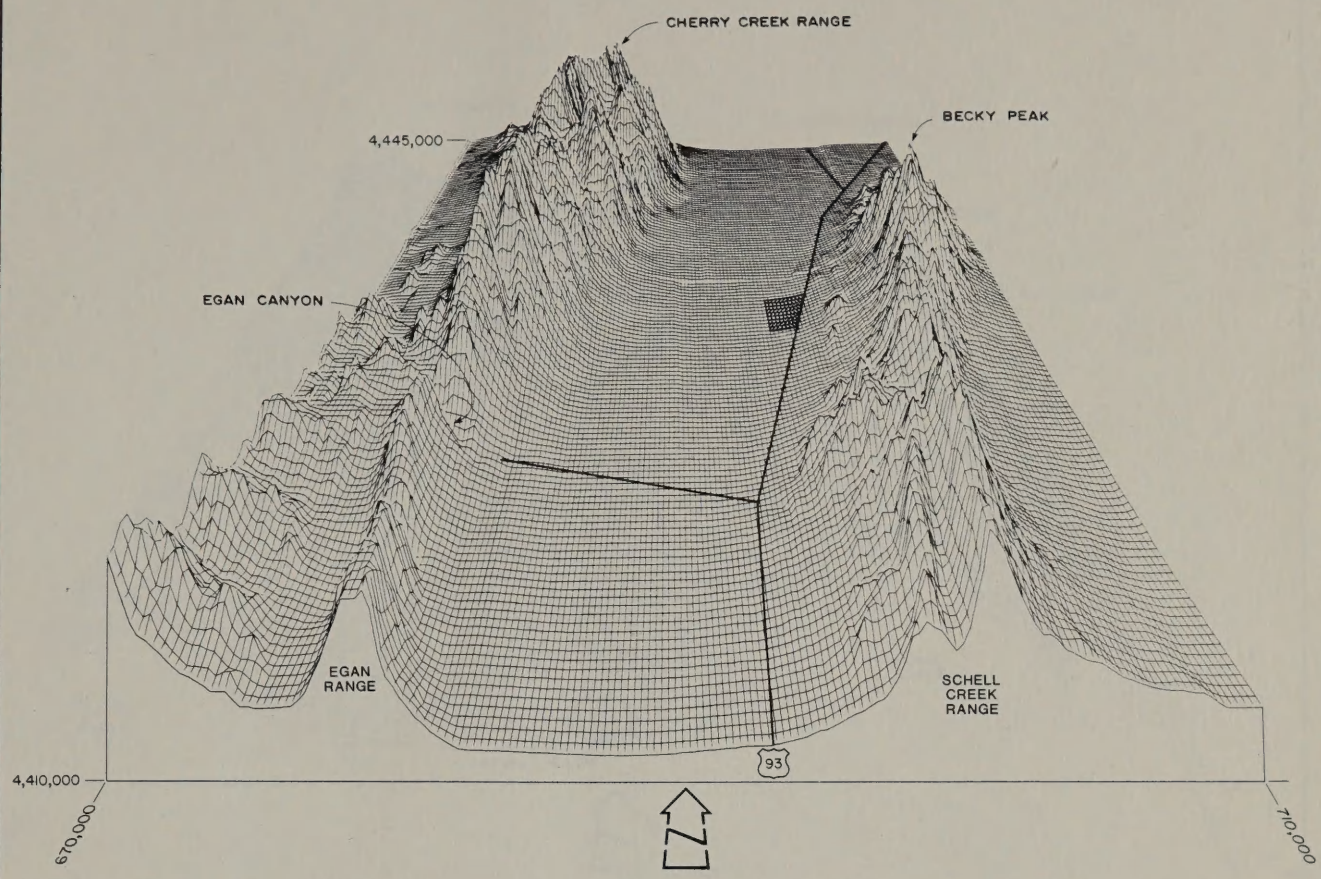
0 15 30 MILES

WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

VIEWSHED FOR WPPP GENERATING STATION

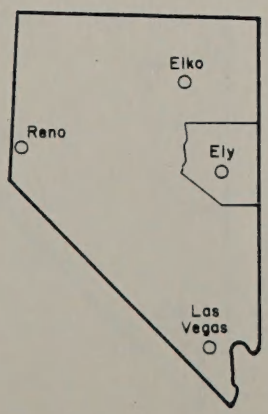
FIGURE 4-2



NORTH STEPTOE VALLEY SITE

HIGHWAYS

NOTES: STUDY AREA COORDINATES ARE IN METERS (UTM ZONE 11).
VERTICAL SCALE IS EXAGGERATED.
GENERATED BY DAMES & MOORE'S GEOGRAPHIC INFORMATION MANAGEMENT SYSTEM.

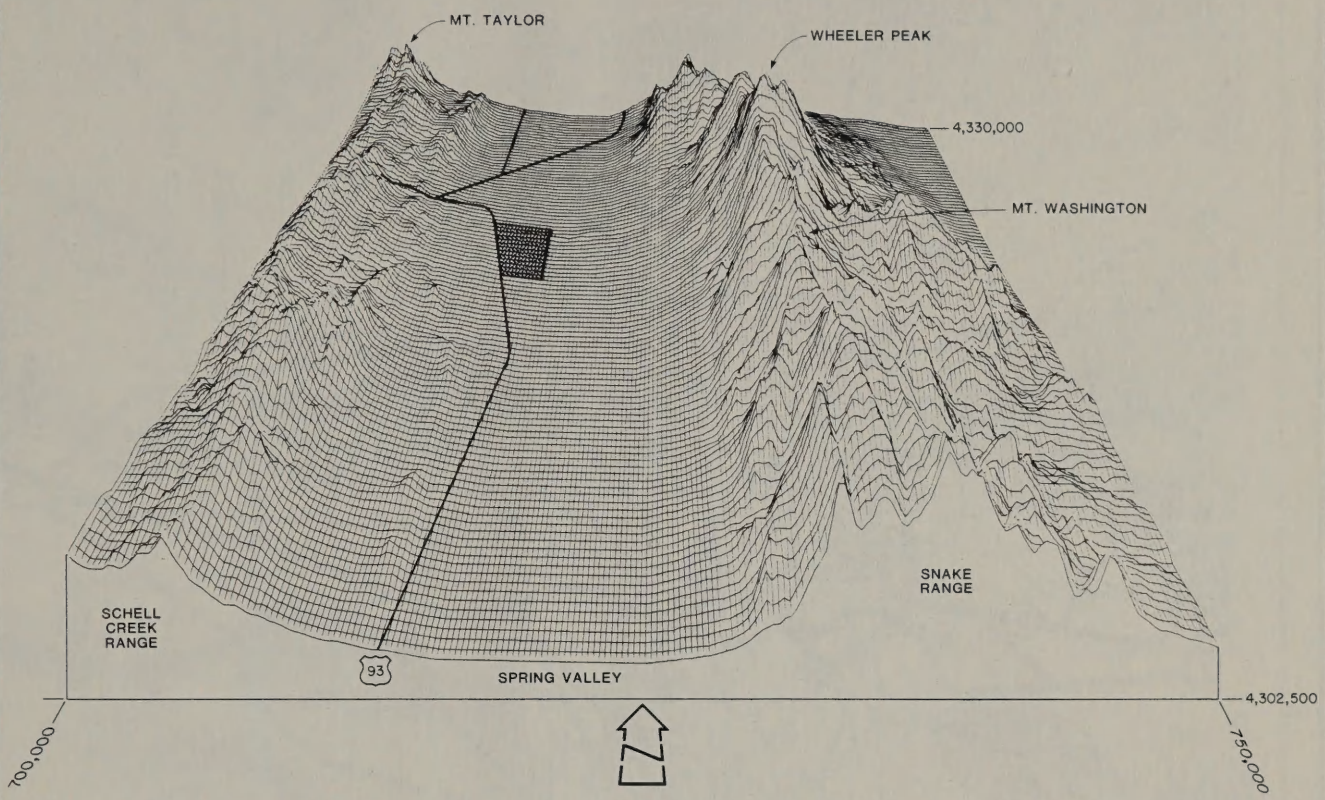


WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

PERSPECTIVE VIEW NORTH STEPTOE VALLEY

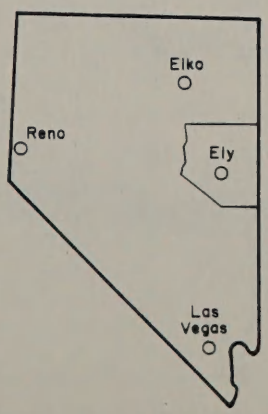
FIGURE 4-3



SPRING VALLEY SITE

HIGHWAYS

NOTES: STUDY AREA COORDINATES ARE IN METERS (UTM ZONE 11).
VERTICAL SCALE IS EXAGGERATED.
GENERATED BY DAMES & MOORE'S GEOGRAPHIC INFORMATION MANAGEMENT SYSTEM.



WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

PERSPECTIVE VIEW SPRING VALLEY

FIGURE 4-4

WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

VISUAL FACTORS
TRANSMISSION LINE CORRIDORS

FIGURE 6-1

APPENDICES

APPENDIX A

METHODOLOGY USED FOR VISUAL SENSITIVITY ANALYSIS

METHODOLOGY USED FOR VISUAL SENSITIVITY ANALYSIS

INTRODUCTION

Various approaches have been used to characterize the aesthetic quality of a landscape and describe the change in that quality resulting from a modification of, or intrusion onto, that landscape. With all approaches, a generalized interpretation must be made about a highly individualized matter, that is, each person's aesthetic values and appreciation of the visual resource. Nevertheless, it is possible to present an evaluation of visual character and change in that character which can be used as a basis for general discussion and environmental decision-making. Such an approach is described here.

Dames & Moore's visual analysis methodology has been adapted from many of the principles outlined in the Visual Management System developed by the U.S. Forest Service (1974). The overall visual sensitivity of the White Pine Power Project (WPPP) can be derived by simultaneous consideration of three factors: 1) landscape character; 2) predicted visibility; and 3) potential exposure to population. The relationship of these visual sensitivity factors and their component parts is diagrammed on Figure 1, and explained in more detail below.

LANDSCAPE CHARACTER

Existing character of a landscape is an important factor of its ability to accommodate visual change that would result from the introduction of man-made features. Five types of landscape character are considered: natural; natural dominance; mixed; man-made dominance; and industrial. Further consideration is given to areas of special scenic significance. The characteristics of each landscape category are discussed below.

Natural Condition

Natural condition refers to areas in a natural, undeveloped state, having only minor alterations present such as unpaved roads or a railroad. The introduction of any man-made feature may significantly alter the existing visual state of a natural condition landscape.

Natural Dominance Condition

Landscapes are considered to be in a natural dominance condition if they have been somewhat influenced by man-made features but still appear predominantly natural in character. Natural dominance conditions usually correlate with sparsely developed lands and may include paved roads, small transmission lines, or isolated rural dwellings.

Mixed Condition

Mixed condition refers to landscapes where the land uses and natural features tend to be equally prominent. Agricultural lands, scattered residences, roads, and transmission lines are often associated with mixed condition landscapes. In this instance, the man-made elements are not necessarily detractive, and a transmission line, for example, could result in a visual intrusion of minor significance.

Man-made Dominance Condition

Man-made dominance condition pertains to landscapes that are highly developed and substantially altered by man. Few natural scenic amenities are retained and, therefore, the introduction of an industrial facility may not result in a significant visual intrusion. Cities, towns, and moderate- to high-density residential communities are examples of man-made dominance landscapes.

Industrial Condition

The industrial condition is characterized by large-scale, heavy industrial or mineral extraction uses within the landscape. The introduction of man-made features, such as

WPPP, would not significantly alter the character of this type of landscape.

PREDICTED VISIBILITY

A visibility inventory is performed to identify the predominant type of visibility that introduced structures would have within their respective visual settings. The visibilty of a structure in the project area is primarily dependent on its spatial relationship to landforms. Vegetation is not a principal determining factor since vegetation types in the project area are predominantly scrub and grasslands which generally facilitate open viewing conditions. Long-range visibility within the project area may also be influenced by meterological conditions such as low clouds or precipitation. It is assumed in this analysis, however, that WPPP facilities would be seen under ideal viewing conditions.

The five levels used to describe predicted visibility are discussed below.

Open Superior Visibility

In a superior position, relative to surrounding areas, the introduced structures would be skylined with no opportunity for topographical modification of visibility.

Open Normal Visibility

In an open normal situation, structures would be visible where topography would provide little or no potential for visual absorption.

Open Inferior Visibility

Open inferior visibility occurs where structures would be in an inferior position in relation to topographical features and surrounding areas. The visibility of introduced structures would be reduced by background influences from most observer locations. Open inferior conditions may occur where a proposed structure is situated adjacent to hills, buttes, or mountains within wide valleys.

Mixed Visibility

Mixed visibility results from conditions where introduced structures could be in an open situation modified by a topographical backdrop or partially skylined, depending on observer position within the viewshed. For example, these conditions occur when a transmission line route traverses ridges along a mountainside.

Restricted Visibility

Restricted visibility exists where an introduced structure would be fully visible only within a confined viewshed due to local topographic conditions. In this situation, the structure could have a significant influence on the immediate visual setting, but would present little or no visibility beyond.

POTENTIAL POPULATION EXPOSURE

The aesthetic analysis recognizes that visual impacts of new structures are directly influenced by individual reactions to views of those facilities. The type of visual exposure can vary with viewing condition and the context of the viewer. Viewing condition includes duration of exposure as well as distance from the structure.

Four basic types of potential population exposure could occur. These are permanent, transitory, scenic highway, and recreational population exposure. These four levels of population exposure are presented below, followed by an explanation of the distance zone analysis.

Permanent Population Exposure

Permanent population exposure would occur in residential areas, including cities, towns, communities, and rural residential concentrations. In these locations, viewers would be exposed to introduced structures on a continual basis, potentially influencing their mental image of their living environment. The significance of visual exposure from these locations will vary, depending on local environmental factors, distance to the structures, degree of visibility, and landscape condition.

Transitory Population Exposure

Transitory population exposure would occur from highways and local roads where viewers could be exposed to introduced structures for a limited duration. From these travel corridors, significance of exposure to a new feature would vary depending on local environmental influences and the nature of travel on these roads (for example, recreational travel or daily work commutes).

Scenic Highway Population Exposure

If public visual exposure to a new structure could occur from state- or county-Designated Scenic Highways,

the visual significance in these highway viewsheds is intrinsically greater than from other population exposure areas.

Recreational Population Exposure

Recreational population exposure to views of introduced structures could take place from within parks, recreational areas, natural areas, highway rest stops, or other significant viewpoints.

Viewing Distance

The population exposure areas are further analyzed in terms of the viewshed or limits of visibility from these locations. Areas that might be visible from identified potential population exposure locations are further broken down into distance zones in order to more accurately assess potential for visual impact. This is accomplished by discriminating among three levels of separation of the viewer and the proposed facility. These visual distance zones are designated as foreground, middleground, and background. The foreground zone is closest to, and includes, the viewer. This zone extends from the viewer location to the initial major break in the visual field or to a point approximately one-half mile from the observer. The middleground zone extends from

the outer limits of the foreground zone or one-half mile, to three to five miles from the observer. The background zone extends beyond the middleground zone to the limits of visibility.

For this evaluation, potential population exposure areas and distance zones were identified through analysis of USGS topographic maps and further refined through field reconnaissance. Potential population exposure areas in the vicinity of the proposed facilities that are not within the facilities' viewsheds were excluded from further analysis.

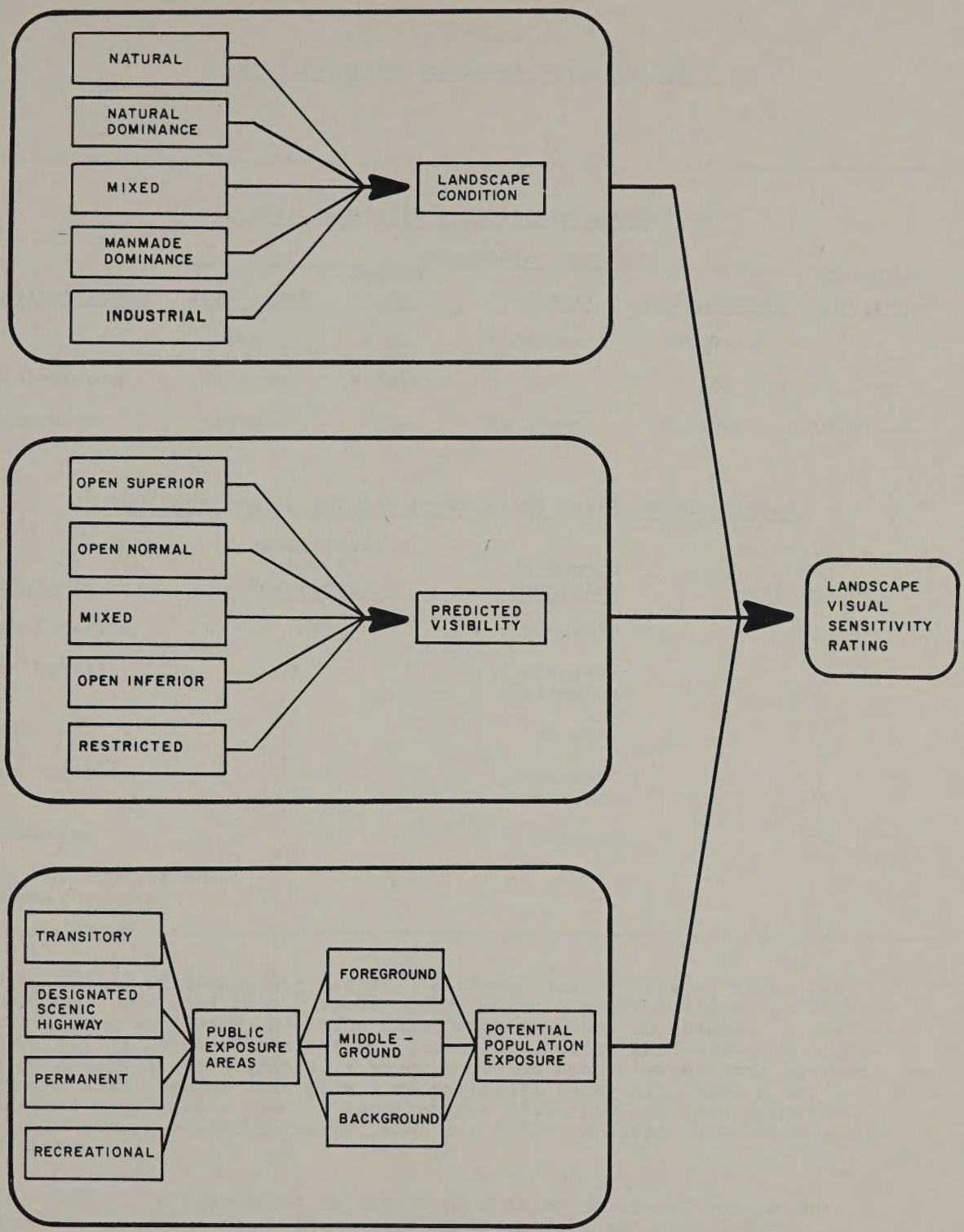
VISUAL SENSITIVITY RATING

The overall visual sensitivity of each of the WPPP facilities is identified through a synthesis of the three factors of landscape condition, predicted visibility, and potential population exposure. Visual effects of a facility are most dependent on the viewer's context and distance from the facility. Therefore, potential public exposure to views of the facility is the most important of the three visual sensitivity factors and consequently determines the basic level of sensitivity. The importance of public exposure is then modified based upon the contributing factors of predicted visibility and landscape condition. For example, public exposure would have greater significance where transmission

towers would be skylined (open superior visibility) within a natural landscape, causing a high degree of contrast with the surroundings.

Five levels of visual sensitivity are assigned based on the population exposure analysis. These levels are then modified with respect to the factors of visibility and landscape condition. Table 1 presents the relationship of population exposure categories and visual sensitivity levels, as well as the relative influence of landscape condition and predicted visibility.

The final derivation of aesthetic impact significance is based on the visual sensitivity ratings discussed above, with additional consideration given to the relative number of potential viewers and to the degree of change that the proposed facilities would introduce into the landscapes. Unique or very scenic natural landscapes are used to further qualify the sensitivity ratings.



WHITE PINE POWER PROJECT

ENVIRONMENTAL IMPACT STATEMENT

VISUAL SENSITIVITY ANALYSIS METHODOLOGY

FIGURE 1

Table 1

Identification of Visual Sensitivity[a]

Initial Sensitivity Rating Determination

Distance Zones	Population Exposure: Transitory	Scenic Highway	Permanent	Recreational	No Major Source[b]
	Low	High	Moderate	Moderate	--
Middleground	Minimum	Moderate	Low	Low	--
Background	Minimum	Low	Minimum	Minimum	Minimum

Modification of Initial Sensitivity Level Determination

Visibility	Sensitivity Level Modification	Landscape Condition	Sensitivity Level Modification
Open Superior	+2	Natural	+2
Open Normal	+1	Natural Dominance	+1
Mixed	0	Mixed	0
Open Inferior	-1	Manmade Dominance	-1
Restricted	-2	Industrial	-2
Areas of exceptional scenic quality	+1		

[a] Five levels of sensitivity exist: minimum, low, moderate, high, and maximum. The sensitivity level modification numbers assigned to visibility and landscape condition categories indicate the change in initial sensitivity level corresponding to each visibility and landscape condition category. For example, a segment of the transmission line located in the middleground view from a recreational area would have a low initial sensitivity level. Assuming the visiblity was open normal and the landscape condition mixed, then the final sensitivity level would be moderate.

[b] Any facility which cannot be seen from a major source of population exposure is rated at minimum sensitivity, and is not modified by visibility level.

APPENDIX B

VISUAL CONTRAST RATING WORKSHEETS

1 *

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	8/23/83
District	Ely
Planning unit	
Activity	

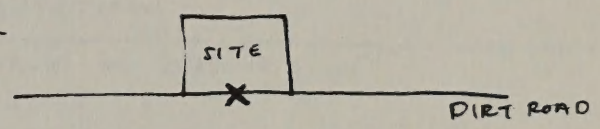
SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
WPPP - Butte Valley Site	1	III (interim)

4a. LOCATION

TOWNSHIP	RANGE	SECTION
21 N	60 E	25, 36
20 N	61 E	30, 31

b. LOCATION MAP



SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER	FORM	Flat – gently sloping valley floor surrounded by angular, dissected mountains, ranging from rolling to precipitous
	LINE	Faint horizontal line formed between valley and base of mountains toward North and east; jagged, angular lines formed by ridges in background mountains
	COLOR	Not apparent in valley due to vegetative cover; light tan or brown where exposed in mountains
	TEXTURE	A minor scenic element due to little exposure; smooth to coarse where exposed in mountains
2. VEGETATION	FORM	Low in profile; flat in valley, following land contours. Not a distinctive form in either valley or mountains.
	LINE	Some discontinuous horizontal lines in valley
	COLOR	Grey-green, green, and pale yellows in valley; dark grey-green with small amount of yellow in mountains
	TEXTURE	Coarse and slightly tufted in foreground, becoming smooth in middleground-background. Solid to spotted in mountains.
3. STRUCTURES	FORM	A faintly visible well on site; minor forms of dirt roads.
	LINE	A few faint horizontal lines caused by dirt roads.
	COLOR	Roads are brown.
	TEXTURE	Roads are coarse in foreground to smooth in background.

(Continued on page 2)

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U.S. Government Printing Office - 81-778-951

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND/WATER	FORM	A minor change in form due to grading / leveling at plant site.
	LINE	Interruption of faint line seperating valley floor from mountains.
	COLOR	More tan in valley due to removal of vegetation and land exposure.
	TEXTURE	Not apparent.
2. VEGETATION	FORM	Some change in form due to vegetative clearing.
	LINE	Straight horizontal and vertical lines may be introduced at edges of areas cleared of vegetation.
	COLOR	Some greens, grey-greens removed due to clearing of vegetation.
	TEXTURE	Some change in texture due to vegetation removal.
3. STRUCTURES	FORM	Two 750 ft vertical cylinders (stacks); two 200 ft ~~boilers~~ blocky structures (boilers); four 40 ft. high cylinders (cooling towers); various other blocky structures
	LINE	Horizontal (railroad, access road, transmission system); angular (conveyors); vertical (edges of stacks)
	COLOR	tans and earth-tone colors
	TEXTURE	Rough-textured concrete

SECTION D. CONTRAST RATING ☐ SHORT TERM ☐ LONG TERM

DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS		19				16				30			

1a. Maximum element contrast: moderate

b. Maximum feature contrast: 16

2. Does project design meet visual resource management requirements? ☐ Yes ☒ No

If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not prelude additional mitigating measures; propose as stipulations, and list in section E.

Evaluator *(signature)*

Date 8/28/83

SECTION E. REDESIGN, STIPULATIONS, MITIGATING MEASURES

Landscape to shield some facilities from view from critical observation point. Revegetate disturbed unoccupied areas with native shrubs, providing a transition from the natural environment to the structures. Locate perimeter fencing in a manner that will shield facilities from roads ~~or~~ and/or highway; wooden slats may be inserted into chain link fencing.

Use careful combination of earth tones and grey-green colors for exterior of prominent structures; use a variety of drab colors, rather than any single solid color.

SECTION F. DESCRIPTION OF ACTIVITY *(Redesigned)*

1. LAND/WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEX-TURE	

(Continued on page 4)

SECTION G. CONTRAST RATING *(Redesigned)*

DEGREE OF CONTRAST	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS: Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS	14				10				24			

1a. Maximum element contrast

moderate

b. Minimum feature contrast

16

2. Does project design meet visual resource management requirements? ☐ Yes ☐ No

If "no," request services of district landscape architect, and describe amount of time and when required.

3. Fiscal year 19

4. Which third? *(check one)*

☐ First ☐ Second ☐ Third

5. TIME REQUIRED

DAYS	MAN-MONTHS

SECTION H. RECOMMENDATIONS

1. Recommendation of staff landscape architect if allowable contrast rating cannot be met

Signature | Date

2. Decision and justification of Area or District Manager

Signature | Date

3. Check appropriate box: ☐ Proceed with project/activity as mitigated ☐ Cancel project/activity as proposed

Signature | Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	8/23/83
District	Ely
Planning unit	
Activity	

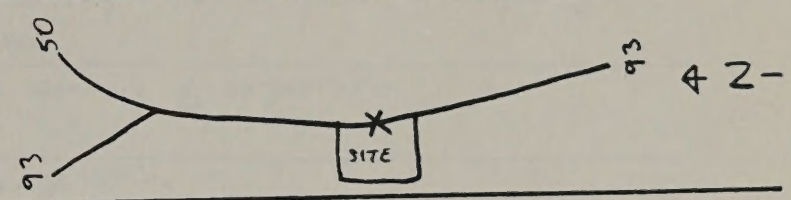
SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
WPPP - North Steptoe Valley Site	2	III (interim)

4a. LOCATION

TOWNSHIP	RANGE	SECTION
24 N	64 E	2, 3, 10, 11

b. LOCATION MAP



SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER	FORM	Gently-sloping valley bounded on S and E by overlapping pyramidal, dissected mountains
	LINE	Straight horizontal line separating valley floor from foothills and at highway to south; jagged, angular lines formed by mountain peaks and ridges
	COLOR	Dull greys and browns on mountains where exposed
	TEXTURE	Smooth to rough where exposed in mountains; not a dominant visual element
2. VEGETATION	FORM	Irregular banding in valley due to changes in composition; low in profile (scrub, brush, grasses); irregular forms in mountains
	LINE	Horizontal intermittent lines formed at edges of bands in valley
	COLOR	Grey-greens and pale yellows of medium intensity in valley; dark grey-greens and grey in mountains
	TEXTURE	Tufted in foreground, becoming smooth in middleground-background in valley; solid within canyons, spotted on mountain slopes facing observer
3. STRUCTURES	FORM	Highway is only visible structure.
	LINE	Rolling line (highway)
	COLOR	Grey
	TEXTURE	Smooth

(Continued on page 2)

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U.S. Government Printing Office - 81-778-951

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND/WATER	FORM	A minor change in form due to grading / leveling at plant site.
	LINE	Interruption of line at base of mountains
	COLOR	More tan in valley due to removal of vegetation and land exposure.
	TEXTURE	Not apparent.
2. VEGETATION	FORM	Interruption of some bands in valley.
	LINE	Interruption of a few lines in valley. Some lines at edges of cleared areas may be introduced.
	COLOR	Some grey-greens removed due to clearing of vegetation.
	TEXTURE	Some change in texture due to vegetation clearing
3. STRUCTURES	FORM	Two 750 ft vertical cylinders (stacks); two 200 ft ~~boilers~~ blocky structures (boilers); four 40 ft. high cylinders (cooling towers); various other blocky structures
	LINE	Horizontal (railroad, access road, transmission system); angular (conveyors); vertical (edges of stacks)
	COLOR	tans and earth-tone colors
	TEXTURE	Rough-textured concrete

SECTION D. CONTRAST RATING ☐ SHORT TERM ☐ LONG TERM

DEGREE OF CONTRAST	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
ELEMENTS	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS	19				16				30			

1a. Maximum element contrast: Moderate

b. Maximum feature contrast: 16

2. Does project design meet visual resource management requirements? ☐ Yes ☐ No

If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not prelude additional mitigating measures; propose as stipulations, and list in section E.

Evaluator *(signature)* | Date

SECTION E. REDESIGN, STIPULATIONS, MITIGATING MEASURES

Landscape to shield some facilities from view from critical observation point. Revegetate disturbed unoccupied areas with native shrubs, providing a transition from the natural environment to the structures. Locate perimeter fencing in a manner that will shield facilities from roads ~~or~~ and/or highway; wooden slats may be inserted into chain link fencing.

Use careful combination of earth tones and grey-green colors for exterior of prominent structures; use a variety of drab colors, rather than any single solid color.

SECTION F. DESCRIPTION OF ACTIVITY *(Redesigned)*

1. LAND/WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEX-TURE	

(Continued on page 4)

SECTION G. CONTRAST RATING *(Redesigned)*

DEGREE OF CONTRAST	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS: Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS	14				16				24			

1a. Maximum element contrast

Moderate

b. Minimum feature contrast

16

2. Does project design meet visual resource management requirements? ☐ Yes ☐ No

If "no," request services of district landscape architect, and describe amount of time and when required.

3. Fiscal year 19

4. Which third? *(check one)*

☐ First ☐ Second ☐ Third

5. TIME REQUIRED

DAYS	MAN-MONTHS

SECTION H. RECOMMENDATIONS

1. Recommendation of staff landscape architect if allowable contrast rating cannot be met

Signature | Date

2. Decision and justification of Area or District Manager

Signature | Date

3. Check appropriate box: ☐ Proceed with project/activity as mitigated ☐ Cancel project/activity as proposed

Signature | Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	8/23/83
District	Ely
Planning unit	
Activity	

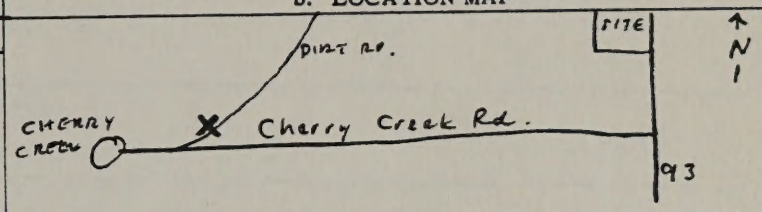
SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
WPPP - North Steptoe Valley Site	3	III (interim)

4a. LOCATION

TOWNSHIP	RANGE	SECTION
24N	64E	2, 3, 10, 11

b. LOCATION MAP



SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER	FORM	Gently-sloping valley bounded on west and east by overlapping pyramidal mountains.
	LINE	Horizontal horizon line where western slope of valley meets sky; jagged, angular lines formed by mountain peaks and ridges
	COLOR	Muted grey of exposed rock in mountains; not apparent in valley
	TEXTURE	Smooth where exposed in mountains; not apparent in valley
2. VEGETATION	FORM	Low profile, irregular banding in valley; wide band of vegetation along middle slope of range in east (horizontal)
	LINE	Horizontal lines formed at bands in valley.
	COLOR	Pale greens and yellows of medium intensity in valley; dark grey-greens in mountains to east.
	TEXTURE	Tufted in foreground-middleground, becoming smooth in background in valley; smooth to coarse in mountains
3. STRUCTURES	FORM	Not apparent
	LINE	Paved highway - vertical; dirt road as curving line; telephone line; fence
	COLOR	Brown and grey
	TEXTURE	Coarse in foreground, becoming smooth in middleground.

(Continued on page 2)

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SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND/WATER	FORM	Not apparent.
	LINE	Interruption of some irregular lines in mountains.
	COLOR	Minor addition of tan due to land exposure.
	TEXTURE	Not apparent.
2. VEGETATION	FORM	Weak interruption of forms in mountains.
	LINE	May interrupt yellow line in valley.
	COLOR	Remnant of grey-greens due to clearing.
	TEXTURE	Not apparent
3. STRUCTURES	FORM	Two 750 ft vertical cylinders (stacks); two 200 ft ~~boilers~~ blocky structures (boilers); four 40 ft. high cylinders (cooling towers); various other blocky structures
	LINE	Horizontal (railroad, access road, transmission system); angular (conveyors); vertical (edges of stacks)
	COLOR	tans and earth-tone colors
	TEXTURE	Rough-textured concrete

SECTION D. CONTRAST RATING ☐ SHORT TERM ☐ LONG TERM

DEGREE OF CONTRAST	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS	5				9				14			

1a. Maximum element contrast: Moderate

b. Maximum feature contrast: 16

2. Does project design meet visual resource management requirements? ☒ Yes ☐ No

If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not prelude additional mitigating measures; propose as stipulations, and list in section E.

Evaluator *(signature)* | Date

SECTION E. REDESIGN, STIPULATIONS, MITIGATING MEASURES

Landscape to shield some facilities from view from critical observation point. Revegetate disturbed unoccupied areas with native shrubs, providing a transition from the natural environment to the structures. Locate perimeter fencing in a manner that will shield facilities from roads and/or highway; wooden slats may be inserted into chain link fencing.

Use careful combination of earth tones and grey-green colors for exterior of prominent structures; use a variety of drab colors, rather than any single solid color.

SECTION F. DESCRIPTION OF ACTIVITY *(Redesigned)*

1. LAND/WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEX-TURE	

(Continued on page 4)

SECTION G. CONTRAST RATING *(Redesigned)*

DEGREE OF CONTRAST	FEATURES											
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS: Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS												

1a. Maximum element contrast

b. Minimum feature contrast

2. Does project design meet visual resource management requirements? ☐ Yes ☐ No

If "no," request services of district landscape architect, and describe amount of time and when required.

3. Fiscal year 19

4. Which third? *(check one)* ☐ First ☐ Second ☐ Third

5. TIME REQUIRED

DAYS	MAN-MONTHS

SECTION H. RECOMMENDATIONS

1. Recommendation of staff landscape architect if allowable contrast rating cannot be met

Signature | Date

2. Decision and justification of Area or District Manager

Signature | Date

3. Check appropriate box: ☐ Proceed with project/activity as mitigated ☐ Cancel project/activity as proposed

Signature | Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	8/22/83
District	Ely
Planning unit	
Activity	

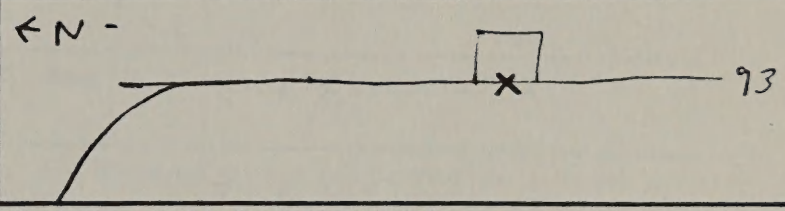
SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
WPPP - Spring Valley Site	4	IV

4a. LOCATION

TOWNSHIP	RANGE	SECTION
13N	66E	13,14,23,24

b. LOCATION MAP



SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER	FORM	Flat valley rising abruptly to steep-sloped precipitous mountains
	LINE	not apparent
	COLOR	Generally not apparent due to vegetative cover; few patches of exposed earth are tan or brown
	TEXTURE	Not apparent in valley; in mountains, a combination of smooth range dissected; ~~and~~ rugged at peaks and outcrops
2. VEGETATION	FORM	Low in profile in valley; banded and irregular in mountains; blocked alfalfa fields at eastern foothills
	LINE	Not apparent in valley; irregular in mountains
	COLOR	Greens and greys of medium intensity in valley; dark green alfalfa fields in background; dull bright dark greens and greys in mountains
	TEXTURE	Stippled and tufted in foreground, becoming smooth in background; smooth to coarse in mountains
3. STRUCTURES	FORM	Linear forms of highway, telephone wires, fences, dirt roads
	LINE	horizontal
	COLOR	brown poles; green and brown fence posts; grey highway; light-colored ranch structures in background; brown dirt roads
	TEXTURE	Smooth where noticable

(Continued on page 2)

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SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND/WATER	FORM	A minor change in form due to grading/leveling at plant site.
	LINE	Interruption of horizontal line at base of mountains
	COLOR	More tan in valley due to vegetation removal.
	TEXTURE	Not apparent.
2. VEGETATION	FORM	Removal of some vegetation.
	LINE	Lines at edges of cleared areas may be introduced.
	COLOR	Some greens and greys removed due to clearing of vegetation.
	TEXTURE	Some change in texture due to clearing of vegetation.
3. STRUCTURES	FORM	Two 750 ft vertical cylinders (stacks); two 200 ft ~~boilers~~ blocky structures (boilers); four 40 ft. high cylinders (cooling towers); various other blocky structures
	LINE	Horizontal (railroad, access road, transmission system); angular (conveyors); vertical (edges of stacks)
	COLOR	tans and earth-tone colors
	TEXTURE	Rough-textured concrete

SECTION D. CONTRAST RATING ☐ SHORT TERM ☐ LONG TERM

DEGREE OF CONTRAST	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS	19				16				30			

1a. Maximum element contrast

—

b. Maximum feature contrast

20

2. Does project design meet visual resource management requirements? ☐ Yes ☒ No

If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not prelude additional mitigating measures; propose as stipulations, and list in section E.

Evaluator *(signature)* | Date

SECTION E. REDESIGN, STIPULATIONS, MITIGATING MEASURES

Landscape to shield some facilities from view from critical observation point. Revegetate disturbed unoccupied areas with native shrubs, providing a transition from the natural environment to the structures. Locate perimeter fencing in a manner that will shield facilities from roads ~~or~~ and/or highway; wooden slats may be inserted into chain link fencing.

Use careful combination of earth tones and grey-green colors for exterior of prominent structures; use a variety of drab colors, rather than any single solid color.

SECTION F. DESCRIPTION OF ACTIVITY *(Redesigned)*

1. LAND/WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEX-TURE	

(Continued on page 4)

SECTION G. CONTRAST RATING *(Redesigned)*

DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS		19				16				24			

1a. Maximum element contrast

—

b. Minimum feature contrast

20

2. Does project design meet visual resource management requirements? ☐ Yes ☐ No

If "no," request services of district landscape architect, and describe amount of time and when required.

3. Fiscal year

19

4. Which third? *(check one)*

☐ First ☐ Second ☐ Third

5. TIME REQUIRED

DAYS	MAN-MONTHS

SECTION H. RECOMMENDATIONS

1. Recommendation of staff landscape architect if allowable contrast rating cannot be met

Signature | Date

2. Decision and justification of Area or District Manager

Signature | Date

3. Check appropriate box: ☐ Proceed with project/activity as mitigated ☐ Cancel project/activity as proposed

Signature | Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	8/22/83
District	Ely
Planning unit	
Activity	

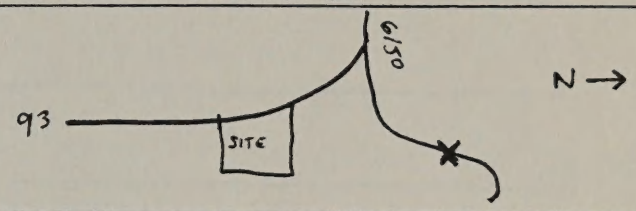
SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
WPPP - Spring Valley Site	5	IV

4a. LOCATION

TOWNSHIP	RANGE	SECTION
13 N	66 E	13, 14, 23, 24

b. LOCATION MAP



SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER	FORM	Gently-sloping valley bounded by ~~sha~~ directed, angular mountains (Mt. Wheeler not in view)
	LINE	Horizontal line separating valley floor from foothills.
	COLOR	Not apparent
	TEXTURE	Not apparent
2. VEGETATION	FORM	Some banding of white sage on valley floor; some banding in mountains
	LINE	Not apparent
	COLOR	Greens and grey-greens, with some yellow in valley
	TEXTURE	Tufted in foreground, becoming smooth in background.
3. STRUCTURES	FORM	Linear forms (telephone line, highway, fence); distant buildings
	LINE	Horizontal
	COLOR	Brown telephone poles; grey highway
	TEXTURE	Smooth where apparent

(Continued on page 2)

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SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND/WATER	FORM	No apparent change
	LINE	Interruption of line at base of mountains
	COLOR	Slightly more tan in valley due to vegetation removal.
	TEXTURE	Not apparent.
2. VEGETATION	FORM	Slight change due to clearing.
	LINE	Not apparent.
	COLOR	Slight loss of grey greens due to clearing.
	TEXTURE	Not apparent
3. STRUCTURES	FORM	Two 750 ft vertical cylinders (stacks); two 200 ft ~~boilers~~ blocky structures (boilers); four 40 ft. high cylinders (cooling towers); various other blocky structures
	LINE	Horizontal (railroad, access road, transmission system); angular (conveyors); vertical (edges of stacks)
	COLOR	tans and earth-tone colors
	TEXTURE	Rough-textured concrete

SECTION D. CONTRAST RATING ☐ SHORT TERM ☐ LONG TERM

DEGREE OF CONTRAST	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS: Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS	9				10				16			

1a. Maximum element contrast

—

b. Maximum feature contrast

20

2. Does project design meet visual resource management requirements? ☒ Yes ☐ No

If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not prelude additional mitigating measures; propose as stipulations, and list in section E.

Evaluator *(signature)* | Date

SECTION E. REDESIGN, STIPULATIONS, MITIGATING MEASURES

Landscape to shield some facilities from view from critical observation point. Revegetate disturbed unoccupied areas with native shrubs, providing a transition from the natural environment to the structures. Locate perimeter fencing in a manner that will shield facilities from roads ~~or~~ and/or highway; wooden slats may be inserted into chain link fencing.

Use careful combination of earth tones and grey-green colors for exterior of prominent structures; use a variety of drab colors, rather than any single solid color.

SECTION F. DESCRIPTION OF ACTIVITY *(Redesigned)*

1. LAND/WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEX-TURE	

(Continued on page 4)

SECTION G. CONTRAST RATING *(Redesigned)*

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS													

1a. Maximum element contrast

b. Minimum feature contrast

2. Does project design meet visual resource management requirements? ☐ Yes ☐ No

If "no," request services of district landscape architect, and describe amount of time and when required.

3. Fiscal year 19

4. Which third? *(check one)* ☐ First ☐ Second ☐ Third

5. TIME REQUIRED

DAYS	MAN-MONTHS

SECTION H. RECOMMENDATIONS

1. Recommendation of staff landscape architect if allowable contrast rating cannot be met

Signature | Date

2. Decision and justification of Area or District Manager

Signature | Date

3. Check appropriate box: ☐ Proceed with project/activity as mitigated ☐ Cancel project/activity as proposed

Signature | Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	8/23/83
District	Ely
Planning unit	
Activity	

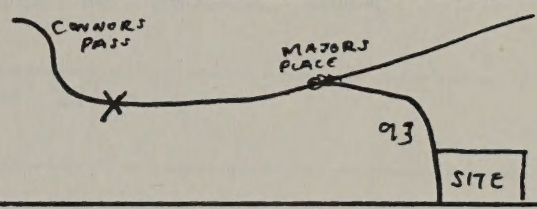
SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
WPPP – Spring Valley Site	6	IV

4a. LOCATION

TOWNSHIP	RANGE	SECTION
13 N	66 E	13,14,23,24

b. LOCATION MAP



SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER	FORM	Flat valley, backdropped by steep, dissected, angular mountains, with attention directed toward peak of Mt. Wheeler
	LINE	Not apparent
	COLOR	Not apparent in valley due to vegetative cover; where exposed in mountains, light reds and browns with some white limestone; white cap of snow on Wheeler Peak over half of year
	TEXTURE	Not apparent in valley; in mountains, combination smooth, dissected; rugged at peaks and outcrops
2. VEGETATION	FORM	Not apparent in valley; some banding in mountains.
	LINE	Alfalfa crops at base of mountains
	COLOR	Grey-green in valley, low intensity; dark green in mountains
	TEXTURE	Smooth in valley; smooth to coarse in mountains
3. STRUCTURES	FORM	One rectilinear block structure; lines
	LINE	Dirt road in valley as vertical line; curving line of highway; horizontal telephone lines
	COLOR	White building; brown dirt road; grey highway
	TEXTURE	Smooth where apparent

(Continued on page 2)

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SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND/WATER	FORM	Weak change due to grading, leveling
	LINE	Not apparent
	COLOR	More tan due to vegetation clearing
	TEXTURE	Not apparent
2. VEGETATION	FORM	Interruption of total form due to clearing.
	LINE	Introduction of weak line at edge of cleared area.
	COLOR	Removal of grey-greens due to clearing.
	TEXTURE	Not apparent
3. STRUCTURES	FORM	Two 750 ft vertical cylinders (stacks); two 200 ft ~~boilers~~ blocky structures (boilers); four 40 ft. high cylinders (cooling towers); various other blocky structures
	LINE	Horizontal (railroad, access road, transmission system); angular (conveyors); vertical (edges of stacks)
	COLOR	tans and earth-tone colors
	TEXTURE	Rough-textured concrete

SECTION D. CONTRAST RATING ☐ SHORT TERM ☐ LONG TERM

DEGREE OF CONTRAST	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS	8				10				19			

1a. Maximum element contrast: —

b. Maximum feature contrast: 20

2. Does project design meet visual resource management requirements? ☒ Yes ☐ No

If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not prelude additional mitigating measures; propose as stipulations, and list in section E.

Evaluator *(signature)* | Date

SECTION E. REDESIGN, STIPULATIONS, MITIGATING MEASURES

Landscape to shield some facilities from view from critical observation point. Revegetate disturbed unoccupied areas with native shrubs, providing a transition from the natural environment to the structures. Locate perimeter fencing in a manner that will shield facilities from roads and/or highway; wooden slats may be inserted into chain link fencing.

Use careful combination of earth tones and grey-green colors for exterior of prominent structures; use a variety of drab colors, rather than any single solid color.

SECTION F. DESCRIPTION OF ACTIVITY *(Redesigned)*

1. LAND/WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEX-TURE	

(Continued on page 4)

SECTION G. CONTRAST RATING *(Redesigned)*

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)
ELEMENTS	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0
TOTALS													

1a. Maximum element contrast

b. Minimum feature contrast

2. Does project design meet visual resource management requirements? ☐ Yes ☐ No

If "no," request services of district landscape architect, and describe amount of time and when required.

3. Fiscal year 19

4. Which third? *(check one)* ☐ First ☐ Second ☐ Third

5. TIME REQUIRED

DAYS	MAN-MONTHS

SECTION H. RECOMMENDATIONS

1. Recommendation of staff landscape architect if allowable contrast rating cannot be met

Signature | Date

2. Decision and justification of Area or District Manager

Signature | Date

3. Check appropriate box: ☐ Proceed with project/activity as mitigated ☐ Cancel project/activity as proposed

Signature | Date

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White Pine Power Project

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